Fair Will Be Better

(Continued from page 1)

to have the exhibits interesting and instructive. W. W. Howard is general superintendent of all the livestock exhibits, and E. G. Bailey is general superintendent of the agricultural exhibits. The departments are as follows:

Dept. A—Horses and mules, Dr. A. G. Moore, Superintendent.

Dept. B—Cattle, Frank Weaver, Superintendent.

Dept. C—Sheep, John Wood, Superintendent, and Frank Palmer and George Green, assistant superintendents.

Dept. D—Swine, J. A. Dennison, Superintendent.

Dept. E—Poultry, H. G. Clement, Superintendent.

Dept. F—Farm Products, W. J. Prater, Superintendent, and J. H. Forbes, A. G. Kingman and W. W. Howard, assistant superintendents.

Dept. G—Horticulture, F. J. Clemo Superintendent, and A. A. Reed, W. S. Lawrence, J. T. Logan and W. W. Howard, assistant superintendents.

Dept. H—Apiary, Howard Mallett, Superintendent, and W. W. Foster assistant superintendent.

Dept. I—Fine Arts, Mrs. W. J. Weese, Superintendent, and Mrs. A. J. Glover, Mrs. D. M. Taggart assistant superintendents.

Dept. J—Bread and Pastry, Mrs. J. D. Billingsly, Superintendent, and Mrs. H. C. Schuppell, Mrs. Chas. Peterson, and Mrs. Irwin Minster, assistant superintendents.

Dept. K—Canned Fruit, Mrs. Jas. Lackey, Superintendent, and Mrs. M. E. Newton and Mrs. Murray Morton, assistant superintendents.

Dept. L—Needlework and Embroidery, Mrs. H. O. Drane, Superintendent and Mrs. H. C. Farmer, Mrs. T. M. Claggett, assistant superintendents.

Dept. M—Knitting and Crochet Work, Mrs. S. D. Dorman, Superintendent, and Mrs. E. A. Fraser, Mrs. E. M. Greig and Mrs. Harry Cockrum asistant superintendents.

Dept. N—Quilts and Sofa Pillows, Mrs. D. B. Purcell, Superintendent, and Mrs. Walter Glenn, Mrs. J. H. Madden, and Mrs. Anna E. Jackson, assistant superintendents.

Dept. O—Infants Wear, Mrs. L. Adam, Superintendent, and Mrs. E. B. Conklin, Mrs. H. W. Clement, assistant superintendents.

Dept. P—Education, Miss Fay Clark, Superintendent. This exhibit will will be completely over-hauled and brought to a higher standard. A part of the exhibit will be sent to the state fair at Salem, after the county fair closes.

Dept. Q—Dogs and Birds and Pet Animals has been consolidated with Dept. E. It has been decided to eleminate the awards for the dogs this year on account of the danger from rabies.

Dept. R—Flowers, Mrs. E. C. Van Petten, Superintendent, and Mrs. Ray Wilson assistant superintendent.

The largest list of special awards yet offered will be put up this year, and the committee in charge of the special awards is composed of W. T. Lampkin, H. Withycombe and D. M. Taggart. The committee will arrange for special awards for practically every department of the fair, and these awards are offered in addition to the regular awards.

The premium list book is now on the press and a copy will be mailed upon request to H. B. Grauel, secretary. Mr. Grauel will also answer promptly, any inqueries concerning any department of the fair.

The usual five days program has been cut this year to four days and as usual, there will be something doing all the time. Arrangements have been made for bringing a carnival company to town and this company will furnish amusement for all. Plans have also been made for ample entertainment in front of the grandstand between the races.

The library committee has received applications from a number of persons who are applying for the position of librarian, which was left vacant upon the resignation of Miss Pinney. The selection will be made by the committee about the fifteenth of this month. Miss Pinney has been appointed to a position in the library at Portland.

SELECTING TOMATO SEED.

All tomato plants produce branches which bear perfect flowers. Though the tomato plant is largely self fertile, especially when grown in the open air, there is always more or less mixing of varieties when the plants are grown close together.

The selection of your own seed is a simple matter. Select plants that are ideal in vigor, freedom from disease, production and character of fruit. Practically all the tomatoes from each plant thus selected may be saved, only fruits that happen to be inferior being discarded.

Inasmuch as not all plants possess equal powers in transmitting their qualities, it is desirable to keep the seed from each plant in a separate package and then to plant the contents of the packages in separate lots next year.

This will give you an opportunity to judge the best stock. An excellent plan is to conduct a trial test of about twenty-five plants from each lot of seed. You will not find it much trouble to weigh and even to count the tomatoes from each lot of plants. The results will justify the work involved.

SEAWEED AS FERTILIZER.

How It Can Be Used to the Best Advantage.

In general the use of seaweed as a fertilizer is a good investment, says a contributor to the Country Gentleman. On sandy soils it may merely be plowed under, but in general it is preferable to compost it.

Seaweed varies considerably in analysis, according to species, but all kinds contain a high percentage of moisture and more potash than do soft structure land plants. The kelp species in particular carry much potash.

The disadvantage of applying large quantities of seaweed to farm land lies in the possibility of injury to some crops through the chlorine in the salt that adheres to the weed and in the acidity that may be developed through decomposition of masses of the weed.

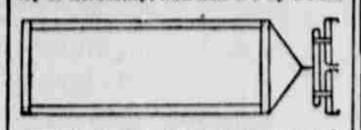
The weed should be spread on the land as far ahead of crop planting as possible to permit of the chlorine's being carried off by drainage. An application of lime will remedy both the acidity and the ill effects of the chlorine. Much larger applications of the seaweed can be made on sandy soils than on heavy soils or on those not well drained.

Plowing under leguminous crops if they are of the deep rooted species, like clover and alfalfa, will maintain soil fertility. The nodules on the roots will collect nitrogen from the air, and the deep roots will bring up potash and phosphoric acid from the subsoil.

But lime should be applied occasionally to prevent any acidity that may develop as the result of decomposition of masses of green growths. At intervals of seven to ten years it would also be advisable to apply phosphorus in the form of ground bones, slag or raw phosphate rock. Commercial fertilizers may be termed crop producers only. They do little for soil improvement.

Moving Four or Five Section Harrow.

This device is a great help in moving a four or five section harrow without taking the harrow apart. Take two 1 by 8 inch boards a little longer than the width of the harrow, splicing on top if necessary, and nail a 1 by 8 inch



piece three feet long across each end. Fasten a hitch on one end and lay the harrow on it, teeth down. With this you can go through a gate almost too narrow for two horses. — Nebraska Farmer.

ORCHARD AND GARDEN.

Keep the cucumbers picked from the vines if you wish them to continue bearing. Never let one ripen on the vines, even if you do throw them away, unless you do not care for any more of them.

Cabbage and cauliflower will grow better if frequently cultivated. Tie the leaves about the cauliflower heads to keep them white.

Save all the wood ashes and use around fruit trees as a fertilizer. Wood ashes are especially good for peach trees, and they will benefit all fruit trees and vines.

Neglected fruit trees are not worth the ground they occupy; they are an eyesore, and when pest infested they are a positive menace to the neighborhood.

Keep the high wheeled wagon out of the orchard. Not only does it cut up the sod, but it is more apt to brush and peel the lower limbs of the trees, and it is a great deal more inconvenient to pour fruit into than the low down wagon, with its broad tires.

Cabbage worms are very apt to bother the plants, but for these a solution of one part kerosene, three parts buttermilk and six parts water is very effective. In making this solution briskly stir the kerosene and buttermilk together for three minutes before adding the water. Apply with a spray pump or a garden sprinkler.

The Argus, $1.00 the year.

Scientific Farming

ELECTRIC POWER AND LIGHT.

Many Farms Here and Abroad Are Served by Lines From City Stations.

By FRANK KOESTER.
[Author of "Electricity For the Farm and Home."]

Many farms are served by lines from city or other electric stations, and in many of the states the long distance transmission lines of numerous hydro-electric plants pass through farming communities more or less populated. These systems are usually of high tension, varying from 13,000 to 60,000, even as high as 150,000 volts. These high voltages are not used directly in motors, but must be reduced by transformers to a suitable value, depending on the nature of the purpose to which the motor is to be applied. Likewise for use on farms and in country residences a transformer must be had to furnish a supply of current at a low voltage value for local distribution.

Where large tracts are to be covered on a single farm practice has proved that a voltage of about 13,000 is

POWER STATION ON A FARM IN NEW YORK STATE.

most suitable, intermediate stationary or portable transformers being used to step the voltage down to that desired on the motors of the plows, thrashing machines, etc.

It is generally recognized that central stations and public utility companies are the best sources of supply from which to draw electricity, owing to their reliability, cheapness and convenience.

When the user, however, is located beyond the reach of the distributing lines of central station companies it is necessary to install an isolated plant to supply light, heat and power, and such a plant is a much more profitable investment than the installation of other kinds of power, such as individual gas, oil or steam engines, to operate the different farm machines.

For the purpose of generating electricity in isolated plants various forms of power are utilized, depending on the locality and the source of fuel or water supply.

A practice much adopted abroad, particularly in Germany, where the government encourages electrically operated farms, is to install rural central stations for the purpose of supplying a number of farms, rural industries, country residences and estates with electric current. By establishing such a station, with either a steam, water, oil or gas plant, a great saving in the production of electric energy may be readily secured. Today in Germany often as high as 100 to 150 consumers are supplied with electric energy from a single rural central station such as have been installed in great numbers within the last fifteen years.

In northern Italy and throughout Switzerland also there is considerable use of the electric energy in agriculture and by small rural communities. A network of distributing lines has been formed, drawing energy from numerous and scattered sources of hydro-electric power, which are, however, interconnected. The Swiss and Italian land proprietors and small farmers throughout western Europe have taken in large numbers to the use of electric light and electric power.

Many of the German farmers carry on industries in connection with their farms, whereby they utilize their by-products, and this is the secret of the success of many well to do men. For instance, one rural central station system may serve four grist mills with five motors, having a total capacity of 105 horsepower, one tile works with a 40 horsepower motor, one sawmill with a 20 horsepower motor, four wheelwrights with motors consuming 16 horsepower and many other industries, such as cabinet making, distilling, blacksmithing, bottling works, etc., which use motors of various capacities. There are also served by the system some twenty consumers for light only, having a total of 243 incandescent lamps and five arc lamps, one railway and freight station with 120 incandescent lamps, one clubhouse with seventy-two lamps and six arc lights, and, in addition to this, two towns are supplied, having a total of 1,692 lamps.

From the above facts and figures it is obvious that electricity can give a new stimulus to agriculture and farming, and at the same time open a new way by which the rural population can be induced to remain on the farm instead of flocking to the cities.

WANTED—Girl to do general house work. Phone 20-N-2.

The Argus, $1.00 the year.

GARDEN ANTS HARMLESS.

Do Not Injure Plants, and Nests May Be Easily Destroyed.

[Prepared by United States department of agriculture.]

An unusual number of complaints have been received this year by the department of agriculture from persons who say that ants are injuring their lawns and gardens. As a matter of fact, these ants do little harm, and the injury that is attributed to them is usually caused by something else. In large numbers, however, the small conical nests which they build on lawns are somewhat unsightly and on this account it may be desirable in some cases to destroy them.

Where there is only a small area to be covered the simplest method is to drench the nests with boiling water. Another simple remedy is to spray the lawn with kerosene emulsion or with a very strong soap wash prepared by dissolving any common laundry soap in water at the rate of one pound or one-half pound to a gallon of water. Such methods are particularly well adapted to small lawns and for the ordinary little lawn ant.

For larger ant colonies of other species, bisulphide of carbon, a chemical which can be purchased at any drug store, will be found effective. This substance can be placed in the nest by means of an oil can or small syringe, the quantity required varying from one-half ounce for a small nest to two or three ounces or more for a large one. An oil can with a long spout is a convenient instrument, as it can be inserted into the nests and the liquid injected without its being brought close to the operator's nose, for the fumes of bisulphide of carbon, although not poisonous, are nauseating. To facilitate the entrance into the nest of the chemical, the ant hole can be enlarged with a sharp stick or iron rod. After the bisulphide of carbon has been injected, the opening should be closed by pressure of the foot in order to retain the bisulphide. This will penetrate slowly thoughout the underground channels of the nest and kill all the inmates. It is important to remember that while bisulphide is perfectly harmless if kept away from all fire, it is very inflammable and may, under certain circumstances, explode when ignited.

Except for the unsightly appearance of their nests, however, the lawn ants do no appreciable harm. They enter houses very rarely and, on the whole, may be said to do no harm of any kind except in so far as they lessen the attractive appearance of the lawn. On the other hand, it is quite possible that by bringing up from the lower depths sand and earth they may distinctly increase fertility by forming a top dressing or soil mulch, and at the same time permit better aeration of the earth.

The Argus $1.00 The Year

The Argus, $1.00 the year.

TO PREVENT FLIES BREEDING

New and Safe Method of Destroying the Larvae Discovered.

[Prepared by United States department of agriculture.]

A safe and effective weapon against the typhoid or housefly has been found in powdered hellebore by scientists of the department of agriculture. Flies lay their eggs chiefly in stable manure. Powdered hellebore mixed with water and sprinkled over the manure will destroy the larvae which are hatched from the eggs. Since powdered hellebore is readily obtainable this puts in the hands of everyone a remedy for one of the pests that has been found dangerous as well as troublesome. Powdered hellebore, however, will not kill adult flies, which must be swatted or trapped.

It has long been known that flies breed in manure, but previous methods of destroying the larvae there by the use of strong chemicals have been open to the objection that the treatment under some conditions lessened the fertilizing value of the manure or actually injured vegetation. This is not true of powdered hellebore. Government experiments have shown that the hellebore is entirely decomposed in the course of the fermentation of the manure and that even in excessive quantities it does no harm except to the larvae it is intended to destroy. Chickens picking in manure treated with it suffer no ill effects.

One-half pound of powdered hellebore mixed with ten gallons of water is sufficient to kill the larvae in eight bushels or ten cubic feet of manure. The mixture should be sprinkled carefully over the pile, especial attention being paid to the outer edges. In most places hellebore is obtainable in 100 pound lots at a cost of 11 cents a pound. This makes the cost of the treatment a little less than seven-tenths of a cent per bushel of manure. A liberal estimate of the output of manure is two bushels a day per horse. The money involved is therefore trifling in comparison with the benefits to the individual and the community from the practical elimination of the disease spreading fly.

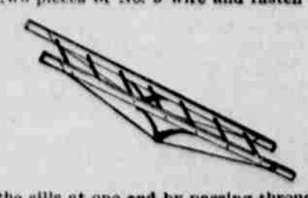
Although fresh manure is the favorite breeding spot, flies lay their eggs in other places as well, such as outhouses, refuse piles, etc. In these places, from which no manure is taken to spread on the fields, considerable saving may be effected through the substitution of borax for powdered hellebore. Applied at the rate of 0.62 pounds per 8 bushels of manure borax is as effective as powdered hellebore in killing the larvae, but costs less than half a cent for each bushel of manure treated. In larger quantities, however, or when the manure itself is spread at a greater rate than 15 tons to the acre, some damage to crops may result. Large quantities of manure are often used by market gardeners and others, and there is always danger of carelessness in applying the borax. The use of the more expensive but safer hellebore is therefore recommended for the treatment of manure. Borax is recommended for all other refuse in which flies may lay eggs.

Scientists who have been working for years to eliminate the fly are convinced that the use of one or the other of these simple measures is a public duty wherever manure and refuse exist. Sanitarians, however, strongly advise the removal of refuse heaps or other unnecessary rubbish or breeding places for flies. In breeding places which cannot be thus disposed of, such as manure or stables, the daily use of powdered hellebore will keep the flies from breeding in these favorite breeding grounds. The best results are obtainable in a community where every one cleans up his premises, traps or kills the flies and systematically treats the manure and other breeding places with powdered hellebore.

The fly is not only a nuisance to human beings and live stock, but spreads disease and filth and is a menace to public health which cannot be tolerated in the face of a demonstrated remedy.

A Well Braced Long Ladder.

Farmers who have occasion to use long ladders often find them weak and dangerous when set up at the proper angle. This can be overcome by a wire brace. Get a blacksmith to make two V shaped irons and fasten them to the side sills with small bolts. Bore small holes through sills at each end. Take two pieces of No. 9 wire and fasten to



the sills at one end by passing through the holes and forming a lock by turning the end back through the holes over small iron pins; then pass the wire over the V irons, drawing them tight with a lever and fasten at the other ends in the same way. This brace will more than double the strength of the ladder and adds but little expense.—Farm Progress.

Potatoes For Stock Feed.

The heavy production and the low price of potatoes have directed attention to their value for stock feed. Hitherto this subject has not received much attention in this country because under ordinary conditions other feeds are undoubtedly much cheaper and better. Some estimate that even at 15 cents a bushel it is more expensive to feed potatoes to stock than it is to feed silage, while on the other hand it is scarcely probable that the farmer can raise potatoes for much less than 30 cents a bushel. Their actual value for feed depends upon many factors, but it is better to make some use of the potatoes on hand rather than let them rot.

Why have an inexperienced man practice on your machine when you can get an expert mechanician? We have an expert from the Ford factory and are making a specialty of Ford repairs.

Good work on your car costs no more here than a poor job elsewhere.

ONTARIO AUTO CO.,
Phone 134 Pete Duford Mgr.

Biggest Corn County

(Continued from Page 1.)

acre. Well, to look at some of the alfalfa fields you would guess they get nearly that much at a cutting.

But the farmers of that section have discovered that their county is even better fitted, both as to soil and climate, for corn than for alfalfa. So they are "going in for corn." In fact they have already "gone in," and now the largest cornfields in the state are in the Malheur, Owyhee and Harper valleys, and the area is rapidly spreading. It will surprise many if in the near future Malheur does not stand at the head of the corn-growing sections of the United States—that is as to the yield to each acre. And eventually as to area grown, for Malheur is "some" county, having 9883 square miles, or about as large as New Jersey and Delaware combined.

The Harney branch station, six miles east of Burns, is in charge of Professor Breithaupt. We found this station doing most excellent work, not only on the farm but in the field. There was a meeting called for the station the day we were there and between 400 and 500 people, mostly farmers and their families, were in attendance. Mrs Breithaupt kept "open house" at the station and as a hostess she is about equal to Mrs. Hanley, who entertained us for the night at the Bell A ranch.

The meeting really began at ten o'clock in the forenoon and lasted until dark. Professor Kerr was the principal speaker and Mr. Hanley presided. Other addresses were made by Regents Myers and Pierce and Professor Scudder. The latter is a great favorite wherever he is known, particularly so in Harney County, where he and Mr. Hanley are credited with securing for that section the branch station. We put in half a day driving over the wonderful Harney Valley, an empire of itself, and after leaving the Bell A ranch the following morning we were shown more of the work of Mr. Breithaupt and his co-workers.

RAISE THINGS.

It was no trouble for our forefathers in this country to raise things. They had a new and opulent soil on which to raise them. The crudest preparation of that soil, the most careless treatment of the plants, could not prevent a harvest. Things are different now. The old methods were all right then, but today they mean poverty—still poorer soil and impoverished tillers of it. But there are ways by which the soils reduced by generations ahead of us can be restored to usefulness. And there are ways by which this restoration can be accomplished while the land pays for it. Before we give up any land that was once fertile let us look into these things to see whether it cannot be made productive again and at the same time raise things to pay the cost.—National Stockman and Farmer.

WAR FARMING.

Women Work in Fields in the British Isles.

The shortage of farm labor in England is causing increasing unrest in agricultural circles.

In some cases the scarcity of farm hands is not so serious as the lack of horses. The lack of male labor is being filled so far as possible by the use of female and child labor.

In the dairy and in the care of small stock it is likely that male labor will be almost entirely dispensed with. Much of the lighter field work also is being done by women, and in the market gardening districts they may be seen in large numbers at such tasks as weeding and setting plants. On some of the smaller holdings they have even undertaken the rougher work of plowing and cultivating.

Some of the agricultural colleges have organized short courses of instruction for women who are willing to enter farm work. The course of instruction includes milking, dairy work, live stock, poultry, preparation of land, use of tools, planting and cultivation. The course reviews eight hours' work daily for fourteen days.

Wages throughout the farming districts have advanced sharply, the average increase being about $1 weekly.